



WINDOW REPLACEMENTS

Why do I need a permit to replace my windows?

This is a common question and people are under the false impression that if they are not altering the structural frame or are just simply replacing the existing windows, then a building permit and inspections are not necessary. The truth is that your windows are a very important component in your home's building envelope, and they affect many aspects of your home's safety, performance, and comfort. Building permits and inspections are necessary to assure and document that important safety regulations are being complied with.

Windows, glazing and/or fenestration require building permits per the California Building Code (CBC) Section 105.1 and the California Residential Code (CRC) Section 105.1. These permits are required so that building inspectors can verify and document that all the minimum code requirements listed below are complied with, and the windows may perform their important work of protecting the health, life and safety of you, your family, and our community.

Windows must comply with the following minimum code requirements:

- Windows may have emergency egress requirements so that first responders can enter a bedroom and perform emergency life-saving rescues or so that occupants can escape, CBC Section 1029, CRC Section 310.
- Many windows, doors, and glazed areas present a safety hazard if tempered glass is not utilized in areas subject to possible impact. These areas include; glass doors, glazing adjacent to doors, glass for tub and shower enclosures, glass adjacent to tubs, glass where the bottom edge is less than 18" above the floor, glass adjacent to stairways, landings, and ramps when glass is less than 60" above the adjacent walking surface and other areas required by CBC Section 2406.4, CRC Section 308 and 327.
- Windows (including retrofit-type installations) are critical in maintaining a home's weather barrier from moisture intrusion, as regulated by CBC Section 1403 and 1405, CRC Section 703.8. Windows are a major cause of water intrusion in a structure which can lead to structural damage and possible growth of harmful mold in wall spaces. Mold can cause health problems in adults and sometimes permanent damage in young children. Also, windows not installed and sealed correctly may invite and promote pest infestation.
- Some windows have specific requirements regarding their size for natural light and their opening size for ventilation, CBC Section 1203 and 1205, CRC Section 303
- Energy conservation is a major function of new windows, required by the California Energy Code, Section 116; however, if installed incorrectly, they can contribute to drafts and energy loss. Not all windows sold are approved for use; windows must be certified by the California Energy Commission to meet the minimum energy requirements of the California Energy Code.

Window replacement can be a very costly project, but having a third-party inspection performed by the City will assure and document that your project is installed correctly, meets the manufacturer's installation requirements and meets all of the minimum code requirements noted above.

What is Like-for-Like window replacement?

Like-for-Like window replacement is when the largest standard size window that fits within the existing frame or existing rough opening. The window replacement is the same operating style as the existing window. The window replacement is not part of a change of occupancy, CRC R310.5(1) and (2).

General Requirements

The following is a listing of the general requirements for permit applications based on the 2022 California Building Code, 2022 California Residential Code, and 2022 California Energy Efficiency Standards. This page is intended to provide general information. Please contact the Building Safety Division for any questions or additional information.

Testing and Labeling (CRC R609.3 and CBC 1709.5.1)

Windows should be approved by third party to conform to AAMA/WDMA/CSA 101/I.S.2/A440 standards.

Fire Rated Windows (CBC 705.8 and CBC 716)

Certain locations in commercial buildings where openings in fire rated walls may require fire rated windows. Consult the Building Safety Division for more information.

Installation Standards (CBC 104.9 and CRC R104.9)

All windows shall be installed in accordance with the manufacturer's requirements (including new flashing).

Emergency Escape (Egress) Windows in Sleeping Rooms (CBC 1031.3 and CRC R310.2)

At least one window in each bedroom is required to meet the following requirements. However, if the existing rough opening is not altered or enlarged, then the replacement window need not comply.

- Minimum net 5.7 square feet of openable area, 5.0 at ground floor
- Minimum net 20" clear width when open
- Minimum net 24" clear height when open
- Maximum height of 44" from the finished floor to the bottom of the clear opening

Fall Protection (CBC 1015.1 and CRC R312.2)

A fall prevention device is required where any window opening (measured at the window sill) is located more than 72 inches above the exterior finished grade, and less than 24 inches above the finished floor.

Tempered Glazing (CBC 2406 and CRC R308)

- Tempered glazing shall be installed in the following locations:
- Within 24" of either side of the door in a closed position.
- Within a 24" arc of either the edge of a door and where the bottom exposed edge of the glazing is less than 60" above the walking surface.
- Adjacent to a bottom stair landing where glazing is less than 36 inches above the landing and within 60 inches horizontally of the landing.
- Adjacent to stairs where glazing is located less than 36 inches above the plane of the adjacent walking surface.
- Within a portion of wall enclosing a tub/shower where the bottom exposed edge of the glazing is less than 60 inches above the standing surface and drain inlet.
- Within 60 inches of a tub/shower where the glazing is less than 60 inches above the walking surface.
- Any glazing meeting all the following conditions:
 - Exposed area of an individual pane greater than 9 square feet
 - Exposed bottom edge is less than 18 inches above the finished floor
 - Exposed top edge is greater than 36 inches above the finished floor
 - Where a walking surface is within 36 inches horizontally of the glazing



Natural Light and Ventilation (CBC 1204.2, 1202.5.1, and CRC R303.1)

Each habitable room (excludes hallways, bathrooms, and laundry rooms) is required to have natural light (windows or skylights) sized to a minimum of 8% of the floor area of the room and ventilation (openable portion of window or skylight) sized to a minimum of 4% of the floor area. Whole house mechanical ventilation and artificial light per section R303.1 may be an alternative.

Efficiency Standards (CEES 150.2(b))

When replacing no more than 75 square feet of windows, the newly installed windows shall have a maximum U-factor of 0.40 and a maximum Solar Heat Gain Coefficient (SHGC) of 0.35. If more than 75 square feet of window area is replaced, the newly installed windows shall be a maximum U-factor of 0.30 and a maximum Solar Heat Gain Coefficient (SHGC) of 0.23.

What to submit for a window replacement permit:

- A completed building permit application
(<https://www.cityoftracy.org/home/showpublisheddocument/12840/637854482675470000>)
- The bid or executed contract for the work.
 - Our fees are based on the valuation of what a contractor would charge.
- A simple floor plan of the house indicating which windows are being replaced.
 - Please identify room types: bedroom, living room, etc.
 - Please label if window is tempered.
- Dimensions of the rooms of which these windows provide light and ventilation.
- List the CURRENT window dimensions, operating style and type of windows to be replaced
- List the NEW window dimensions, operating style and type of windows to be installed (e.g. 5' x 5' fixed, vinyl-framed).
- Maximum sill height from finished floor and minimum emergency rescue and egress height and width window dimensions. U-factor and the Solar Heat Gain Coefficient of each window.
- Appropriate energy compliance documentation
 - This can be obtained by visiting Energy Code Ace or the CA Energy Commission

